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## The Foliar Embryos of *Tolmiea Menziesii*

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## SHORTENING THE REST PERIOD OF THE TUBERS OF THE JERUSALEM ARTICHOKE, *HELIANTHUS* *TUBEROSUS* L.

E. S. HABER

Experiments are reported in which the rest period of dormant tubers of the Jerusalem artichoke was shortened by storage at temperatures near or slightly below freezing. The length of the rest period or dormant stage was directly dependent on storage temperature; the lower the temperature down to slightly below freezing, the shorter the rest period.

Ethylene chlorohydrin and thiourea were effective in breaking the dormant period. Sodium thiocyanate was not as effective as ethylene chlorohydrin and thiourea and sodium nitrate was not effective at all.

Tubers harvested on Sept. 27 germinated as promptly, although considerably less mature than tubers harvested Nov. 1.

Ethylene chlorohydrin and thiourea treatments applied to tubers no longer dormant delayed germination.

Thiourea caused multiple sprouting, which was more pronounced when tubers were treated after dormancy had been broken.

Tubers held for three or more months at temperatures near the freezing point exhibited a tendency to produce more than one sprout per seed piece.

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## THE FOLIAR EMBRYOS OF *TOLMIEA MENZIESII*

JOHN A. YARBROUGH

A careful study has been made of the developmental history of the leaf borne shoot and roots of *Tolmiea Menziesii*. Comparisons of these formations with similar ones appearing on leaves of *Bryophyllum calycinum* are considered.

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